WHAT IS CLAIMED IS:

1. A process for identifying an agent that modulates the activity of a cancer-related gene comprising:

(a) contacting a compound with a cell containing a gene that corresponds to a polynucleotide having a sequence selected from the group consisting of SEQ ID NO: 1-2276 and under conditions promoting the expression of said gene; and

(b) detecting a difference in expression of said gene relative to when said compound is not present

thereby identifying an agent that modulates the activity of a cancer-related gene.

2. The process of claim 1 wherein said gene has a sequence selected from the group consisting of SEQ ID NO: 1-2276.

3. The process of claim 1 wherein the cell is a cancer cell, the sequence is selected from SEQ ID NO: 1-92, 544-809 and 1189-1851 and the difference in expression is a decrease in expression.

4. The process of claim 2 wherein the cell is a cancer cell, the sequence is selected from SEQ ID NO: 1-92, 544-809 and 1189-1851 and the difference in expression is a decrease in expression.

5. The process of claim 3 or 4 wherein the cancer is lung cancer.

6. The process of claim 5 wherein the cell is an adenocarcinoma cell and the sequence is selected from SEQ ID NO: 1-92.

7. The process of claim 5 wherein the cell is a neuroendocrine carcinoma cell and the sequence is selected from SEQ ID NO: 1189 - 1607.

8. The process of claim 5 wherein the cell is a squamous cell carcinoma cell and the sequence is selected from SEQ ID NO: 1608-1850.

9. The process of claim 1 wherein the cell is a non-cancerous cell, the sequence is selected from SEQ ID NO: 93-543, 810-1188 and 1851-2276 and the difference in expression is an increase in expression.

10. The process of claim 2 wherein the cell is a non-cancerous cell, the sequence is selected from SEQ ID NO: 93-543, 810-1188 and 1851-2276 and the difference in expression is a decrease in expression.

11. The process of claim 1 - 10 wherein expression is determined for more than one said gene.

12. The process of claim 1 - 10 wherein expression is determined for at least 5 said genes.

13. The process of claim 1 - 10 wherein expression is determined for at least 10 said genes.

14. The process of claim 1 - 10 wherein expression is determined for all said genes of step (a).

15. A process for identifying an anti-neoplastic agent comprising contacting a cell exhibiting neoplastic activity with a compound first identified as a cancer-related gene modulator using a process of one of claims 1 – 14 and detecting a decrease in said neoplastic activity after said contacting compared to when said contacting does not occur.

16. The process of claim 15 wherein said neoplastic activity is accelerated replication.

17. The process of claim 15 wherein said decrease in neoplastic activity results from the death of the cell.

18. A process for identifying an anti-neoplastic agent comprising administering to an animal exhibiting a cancerous condition an effective amount of an agent first identified according to a process of one of claims 1-17 and detecting a decrease in said cancerous condition.

19. A process for determining the cancerous status of a cell, comprising determining the level of expression in said cell of at least one gene that corresponds to a polynucleotide having a sequence selected from the group consisting of SEQ ID NO: 1 – 2276 wherein an elevated expression relative to a known non-cancerous cell when the sequence is one of SEQ ID NO: 1-597 or a reduced expression relative to a known non-cancerous cell when the sequence is one of SEQ ID NO: 598-2276 indicates a cancerous state or potentially cancerous state.

20. The process of claim 19 wherein said gene comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 1-2276

21. The process of claim 19 or 20 wherein said expression is the expression of more than one said gene.

22. The process of claim 19 or 20 wherein said expression is the expression of at least 5 said genes.

23. The process of claim 19 or 20 wherein said expression is the expression of at least 10 said genes.

24. The process of claim 19 or 20 wherein said expression is the expression of all said genes.

25. A process for determining if a test gene is a cancer initiating or facilitating gene comprising contacting a cell expressing said test gene with an agent that decreases the expression of a gene that corresponds to a polynucleotide having a sequence selected from the group consisting of SEQ ID NO: 1-92, 544-809 and 1189-1851 and detecting a decrease in expression of said test gene compared to when said agent is not present, thereby identifying said test gene as being a cancer initiating or facilitating gene.

26. The process of claim 25 wherein the gene determined by said process is an oncogene.

27. The process of claim 25 wherein the gene determined by said process is a cancer facilitating gene.

28. The process of claim 25 wherein said decrease in expression is due to a decrease in copy number of said gene in said cell or a cell derived from said cell.

29. A process for determining if a test gene is a cancer suppressor gene comprising contacting a cell expressing said test gene with an agent that increases the expression of a gene that corresponds to a polynucleotide having a sequence selected from the group consisting of SEQ ID NO: 93-543, 810-1188 and 1851-2276 and detecting a decrease in expression of said test gene compared to when said agent is not present, thereby identifying said test gene as a cancer suppressor gene.

30. The process of claim 29 wherein said increase in expression is due to an increase in copy number of said gene in said cell or a cell derived from said cell.

31. A process for treating cancer comprising contacting a cancerous cell with an agent having activity against an expression product encoded by a gene sequence selected from the group consisting of SEQ ID NO: 1-92, 544-809 and 1189-1851.

32. The process of claim 31 wherein said cancerous cell is contacted *in vivo*.

33. The process of claim 31 wherein said agent has affinity for said expression product.

34. The process of claim 33 wherein said agent is an antibody.

35. The process of claim 31 wherein said agent is an apoptosis-inducing agent.

36. A method for producing a product comprising identifying an agent according to the process of claim 1 - 18 wherein said product is the data collected with respect to said agent as a result of said process and wherein said data is sufficient to convey the chemical structure and/or properties of said agent.

37. A process for treating a cancerous condition in an animal afflicted therewith comprising administering to said animal a therapeutically effective amount of an agent first identified as having anti-neoplastic activity using the process of claim 18.

38. A process for protecting an animal against cancer comprising administering to an animal at risk of developing cancer a therapeutically effective amount of an agent first identified as having anti-neoplastic activity using the process of claim 18.

39. The process of claim 37 or 38 wherein said cancer is lung cancer.

40. The process of claim 39 wherein said cancer is adenocarcinoma.

41. The process of claim 39 wherein said cancer is squamous cell carcinoma.

42. The process of claim 39 wherein said cancer is neuroendocrine carcinoma.

43. A process for determining functionally related genes comprising contacting one or more gene sequences selected from the group consisting of the sequences of SEQ ID NO: 1 – 2276 with an agent that modulates expression of more than one gene in such group and thereby determining a subset of genes of said group.

44. The process of claim 43 wherein said functionally related genes are genes modulating the same metabolic pathway.

45. The process of claim 43 wherein said genes are genes encoding functionally related polypeptides.

46. The process of claim 43 wherein said all of genes are genes whose expression is modulated by the same transcription activator or enhancer sequence.